

# Virginia TMDL Implementation Project Report

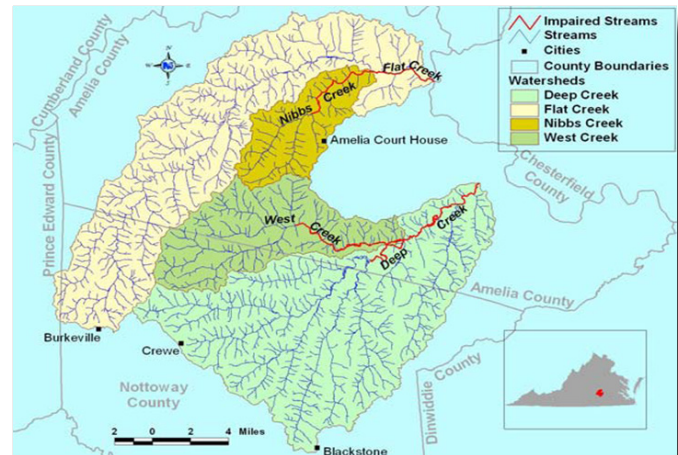
## DEEP & FLAT CREEKS

### West & Nibbs Creeks

## Virginia Nonpoint Source MANAGEMENT PROGRAM

### Project Location and Background

Flat, Nibbs, Deep, and West Creeks are located in Amelia and Nottoway Counties, Virginia. An implementation project to address bacteria impairments was initiated in 2006. The VA Department of Conservation and Recreation (DCR) contracted with the Piedmont Soil and Water Conservation District and provided Water Quality Improvement Funds (WQIF) towards the project implementation.



### Implementation Highlights

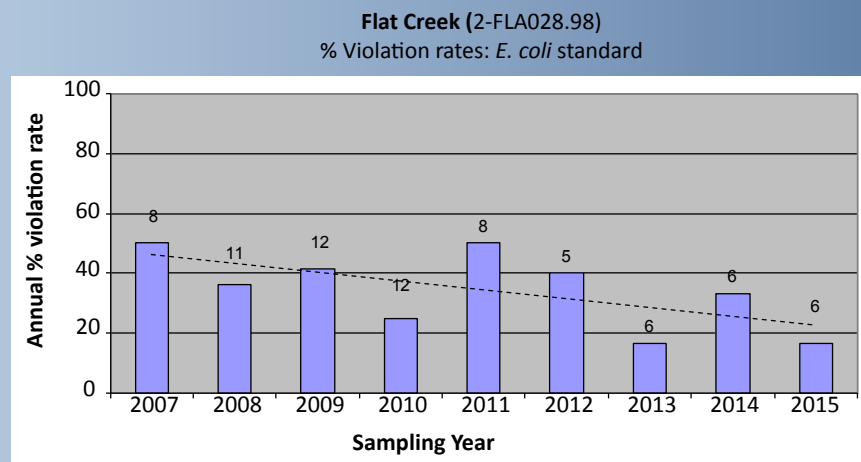
The table below lists BMPs implemented in the watershed within the period of 2006 through June 2015. DCR discontinued the implementation project at the end of FY2015. These BMPs were funded with state WQIF/VNRCF targeted TMDL cost-share funds. Total cost-share payments for these BMPs amounted to \$1,252,725. A total of 17,154 feet of stream fencing has been installed through the USDA Conservation Reserve Enhancement Program. State TMDL fencing practices total an additional 187,795 feet, bringing total fencing installed in the watershed to 39 miles. In addition, a total of 180 acres has been enrolled under a new pasture management BMP.

**Table 1.** Deep, Flat, West and Nibbs  
BMP Summary: 2006-2015

*BMP code	Units	Installed
CP-CNT	Acres	111
CRFR-3	Acres	49
CRSL-6	Feet	17,154
FR-1	Acres	130
LE-1T	Feet	52,649
LE-2T	Feet	11,100
NM-3B	Acres	55
SL-1	Acres	174
SL-6	Feet	46,719
SL-6T	Feet	37,828
SL-8B	Acres	2,590
SL-8	Acres	38
SL-8H	Acres	3,973
SL-10T	Acres	180
SL-11	Acres	1
SL-15A	Acres	146
SL-15B	Acres	176
WP-2T	Feet	29,809
WP-3	Acres	1,477
WP-4	Syst.	3
WQ-4	Acres	1,471

\*For BMP code definitions, see Appendix 2 or visit the [DCR webpage](#).

### Water Quality Monitoring Results



Water quality data collected by VADEQ from 2007 through 2015 was analyzed to determine the impact of BMPs on *E. coli* violation rates and associated long term trends.

The bar graph shows the percent violation rate for samples collected annually that did not meet the water quality standard of 235 cfu/100 mL. The number of samples collected each year is shown above each bar. The linear regression fitted to the data shows a significant decreasing trend in violation rates over the sampling period, **indicating significant improvement in water quality in Flat Creek.**



**For more information, contact:**

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